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| 10/826,718   | 04/16/2004  | Glen Anderson        | ACER-45263          | 2184             |
| 116 7590 05/12/2009<br>PEARNE & GORDON LLP<br>1801 EAST 9TH STREET<br>SUITE 1200<br>CLEVELAND, OH 44114-3108 |             |                      |                     |                  |
| EXAMINER<br>NGUYEN, PHILLIP H  |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/826,718

**Applicant(s)**

ANDERSON, GLEN

**Examiner**

Phillip H. Nguyen

**Art Unit**

2191

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 19-37, 39-45 and 53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-37, 39-45 and 53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**ETAILED ACTION**

1. This action is in response to the amendment filed 3/4/2009.
2. Claims 1-16, 19-37, 39-45, and 53 remain pending in this application with claims 1, 2, 4, 24, 27, 28, 35-37, 39, 42, 44, and 45 amended; claims 17, 18, 38, and 46-52 canceled.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-16, 19-37, 39-45, and 53 have been considered but are moot in view of the new ground(s) of rejection.

***Specification***

4. The amendment filed 3/4/2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claims 1, 35, and 42 comprise newly limitation such as "selected **plurality of different** software" or "selected **plurality of** software" which are not described in the specification. Applicant is respectfully suggested to at least indicate where in the specification these limitations are described. For examination purposes, examiner interprets these limitations as "**selected software.**" Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 35, and 42 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 35, and 42 comprise newly limitation such as "selected **plurality of different** software" or "selected **plurality of** software" which are not described in the specification. Applicant is respectfully suggested to at least indicate where in the specification these limitations are described. For examination purposes, examiner interprets these limitations as "**selected software.**"

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 42 comprises "means plus function" limitations that invoke 35 U.S.C. 112, sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed functions such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed functions. Since no other specific structure, material, or acts for performing the recited functions disclosed in the specification other than software, the claim has not invoked 35 U.S.C. 112, sixth paragraph hen considered below.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed functions. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

9. Claims 42-45 are rejected under 35 U.S.C. 112, second paragraph, as no disclosure or insufficient disclosure of the structure, material, or acts for performing the functions recited in a claim limitation invoking 35 U.S.C. 112, sixth paragraph. Claim 42 uses "means plus function" language that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed functions. The only "means" for performing the cited function disclosed in the specification appears to be software. Applicant is respectfully suggested to amend the claim to delete the "means plus function" language to obviate the 112 rejection. Claims 43-45 directly or indirectly depend on claim 42 and therefore suffer the same deficiency.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-10, 15, 16, 19, 20, 22-26, 29, 30, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano).

As per claim 1

Cheng teaches a method for downloading up-to-date versions of selected software from a plurality of software vendors over a network and for installing the up-to-date versions of selected software to a hardware unit, the network comprising a first software handling machine configured to execute a download manager (see at least col. 6:24-25 **"the client computers 101 includes a client application 104"**), a second software handling machine configured to execute a download supervisor (see at least col. 6:26 **"service provider 102"**) and a plurality of download servers for downloading the up-to-date versions of selected software from the plurality of vendors (see at least col. 6:31-34 **"Each software vendor computer 103 coupled to the service provider computer 102 stores software update information, software products, information files and the like"**), the method comprising:

wherein said selected different software includes software that were pre-configured into the hardware unit at or before the time of sale of the hardware unit (see at least col. 6:12 **"updating diverse software products on user's computers"** – *Note: the diverse software products include applications, system utilities, drivers, and other*

*executables or resources, which are installed/pre-configured in to the computers either at the time of purchased, after the time of sale, or time of manufactured the computers, and need to be updated to the update-to-date versions. Cheng further teaches col.*

1:26-32 “As used here **“software vendors”** includes any entity that distributes software products, even if the entity also manufactures or distributes hardware or other non-software products. These software vendors frequently improve their products, by adding new features, or by fixing known problems, and make these software updates available to their users. These updates may or may not be free” – Thus, the diverse software products on the user’s computers are the software products selected to installed either at the time of sale, after the time of sale, or at the time of manufactured the computers, and the software vendors distribute up-to-date versions to update the selected diverse software products);

sending a download transaction request comprising the transaction identifier from the download manager to the download supervisor (see at least col. 7:5-14 **“the update process is typically initiated on the client computer 101. The user may manually initiate the process or it may occur automatically...In each case, the user logs in 201 to the service provider computer 102 with the client application 104 in a conventional manner, providing a user ID, a password, and the like”**); and

responsive to determining, by the download supervisor, that the requested download transaction is authorized (see at least col. 7:40-45 **“The registered users are authenticated 203 by the service provider computer 102, using conventional**

**authentication mechanisms, such one or more passwords, digital signature, certificate, or the like”), performing the steps of:**

assembling, by the download supervisor, a download/installation instruction comprising up-to-date software access information for the selected software (see at least col. 15:17-19 **“the service provider computer 102 resolves the update ID 819 against the update table 807 to obtain the record for this update, including the URL list 823 identifying the location of the relevant update files”**);

communicating the download/installation instruction from the download supervisor to the download manager (see at least col. 15:20 **“...This record is returned to the client computer 101”**); and

performing, by the download manager, a download and installation of the up-to-date versions of selected software to the hardware unit pursuant to the download/installation instruction (see at last col. 15:21-35 **“The client computer 101 accesses the identified URLs and downloads the software update files, typically from the software vendors computer 103...The software update is then installed 212 by the client application 104 as described”**).

Cheng does not explicitly teach

associating, by said download manager, a transaction identifier with selection data indicating the selected software for which said up-to-date versions of selected plurality of software are to be downloaded, said selection data being determined at the time of sale of the hardware unit,



However, Kawano teaches

associating, by said download manager, a transaction identifier with selection data indicating the selected software for which said up-to-date versions of selected plurality of software are to be downloaded, said selection data being determined at the time of sale of the hardware unit (see at least col. 9:7-36 **"In step S61, when the user who has purchased the CE device 1 runs a registration application for the CE device 1 (for example, a browser, or a dedicated application for registering the CE device), the CE device 1 performs a process for obtaining user information (i.e. selection data). For example, the CE device 1 may display on a display of output section 47 an input form for entering user information such as the user's name, address, telephone number, as well as for example, zip-code, date of birth, sex, type of credit card, credit card number and expiration date and the like (hereinafter referred to as user information for authentication), the device ID is already displayed in the input form...When the user hits the register button 47C, the CE device 1 obtains the information entered in the input form as the user information for authentication...the CE device transmits the user information for authentication..."** – *Note: The user information being determined at the time of sale of the CE device 1. The user information in combination with the CE device ID is used to register the device to the update data supply server. This information also indicates the selected software stored in the CE device 1 to the update data supply server in order to update the selected software stored in the CE device 1 at the time of sale).*

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng to incorporate the teaching of Kawano to allow the client computers to associate the user information (i.e. selection data) with the transaction identifier (i.e. user ID, password, device ID, or the like) to register the client computers with the provider or vendors for updating the diverse software products. The modification would have been obvious to an ordinary skill in the art because it would allow the server to use the user information for authentication and updating purposes.

As per claim 2

Kawano teaches

wherein the transaction identifier comprises a serial number of the hardware unit (see at least col. 5:10 "device ID").

As per claim 3

Cheng teaches

wherein the software access information comprises a network address for a download server (see at least col. 15:19-20 "...including the URL list 823 identifying the location of the relevant update files. This record is returned to the client computer 101. The client computer 101 accesses the identified URLs and downloads the software update files").

As per claim 4

Cheng teaches

wherein the first software handling machine comprises the hardware unit (see at least col. 6:15 "**client computer 101**"), and wherein said selected plurality of different software includes a plurality of software that are added on after the time of sale of the hardware unit (see at least col. 6:12 "**updating diverse software products on user's computers**" – *Note: the diverse software products include applications, system utilities, drivers, and other executables or resources, which are installed/pre-configured in to the computers either at the time of purchased, after the time of sale, or time of manufactured the computers, and need to be updated to the update-to-date versions.*

Cheng further teaches col. 1:26-32 "As used here "**software vendors**" includes any entity that distributes software products, even if the entity also manufactures or distributes hardware or other non-software products. These software vendors frequently improve their products, by adding new features, or by fixing known problems, and make these software updates available to their users. These updates may or may not be free" – *Thus, the diverse software products on the user's computers are the software products selected to installed either at the time of sale, after the time of sale, or at the time of manufactured the computers, and the software vendors distribute up-to-date versions to update the selected diverse software products).*

As per claims 5 and 9

Kawano teaches

wherein the download manager executes in a boot sequence of the first software handling machine (see FIG. 2; see also at least col. 5:46-60 **"when the power of the CE device 1 is turned on (i.e. boot sequence), it is judged that all of the software needs to have the presence of update data confirmed...if it is judged that such software does exist, the process proceeds to step S3"**).

As per claim 6

Cheng teaches

wherein the download manager loads from a removable storage media (see at least col. 13:41-44 **"The client application 104 may be provided to the client computer 101 on a computer readable media, such as a CD-ROM, diskette, 8mm tape, or by electronic communication over the network 106 for installation and execution thereon"**).

As per claim 7

Cheng teaches

wherein the first software handling machine comprises a personal computer (see at least col. 6:15 **"client computer 101"**).

As per claim 8

Cheng teaches

wherein the download manager launches from the hardware unit (see at least col. 6:24-25 **"the client computer 101 includes a client application 104"**).

As per claim 10

Kawano teaches

wherein the download manager sends a download transaction request comprising a predetermined selection of software (see at least col. 5:38-41 **"the CE device 1 judges whether or not it is necessary to confirm the presence of updates for all of the installed software, which in this example would be the software program that come bundled with the CE device 1"**).

As per claim 15

Cheng teaches

storing a record of the download transaction in a central database (see at least col. 10:55-62 **"Finally, the update database 709 may also store information describing an installation process for installing a software update..."**).

As per claim 16

Cheng teaches

wherein data comprising the transaction identifier is encrypted (see at least col. 6:48-51 **“authentication and verification may be implemented using conventional encryption techniques”**).

As per claim 19

Kawano teaches

wherein the selection data is determined in whole or in part in an interactive process (see at least col. 9:30-35 **“the CE device 1 transmits the user information or authentication obtained in step S61 along with the device ID...the authentication agent server 2 receives user information or authentication...”**).

As per claim 20

Kawano teaches

obtaining the selection data by a point of sale application (see at least col. 9:7-36 **“In step S61, when the user who has purchased the CE device 1 runs a registration application for the CE device 1 (for example, a browser, or a dedicated application for registering the CE device), the CE device 1 performs a process for obtaining user information (*i.e.* selection data). For example, the CE device 1 may display on a display of output section 47 an input form for entering user information such as the user’s name, address, telephone number, as well as for example, zip-code, date of birth, sex, type of credit card, credit card number and expiration date and the like (hereinafter referred to as user information for**

**authentication)...** – *The user information is obtained at the time the CE device is purchased for registering purposes).*

As per claim 22

Kawano teaches

wherein the selection data is determined in whole or in part by looking up the transaction identifier in a central database (see at least FIG. 1 **"Authentication Agent Server 2"** – *stores user information (i.e. selection data) for authenticating the CE device 1*).  
1).

As per claim 23

Kawano teaches

wherein determining whether the download transaction is authorized comprises evaluating the transaction identifier (see at least col. 9:38-40 **"the authentication agent server 2 checks if a device registration master 4A in which the received device ID and pass phase are registered exists in order to judge whether the CE device 1 is a device that is authentic"**).

As per claim 24

Cheng teaches

interrogating the hardware unit to obtain information regarding the plurality of software that were pre-configured into the hardware unit at or before the time of sale of

the hardware unit (see at least col. 46-53 **"The client application 104 then analyzes 204 the client computer 101 to determine a list of installed software products. The list of installed software products typically includes applications, system utilities, drivers, and other executable or resources. These software products will typically be from numerous diverse software vendors, a number of who will maintain software vendor computers 103 on the network 106"**).

As per claim 25

Cheng teaches

wherein interrogating the hardware unit to obtain information comprising preexisting software comprises executing a Desktop Management Interface (see at least col. 46-53 **"The client application 104 then analyzes 204 the client computer 101 to determine a list of installed software products. The list of installed software products typically includes applications, system utilities, drivers, and other executable or resources. These software products will typically be from numerous diverse software vendors, a number of who will maintain software vendor computers 103 on the network 106"**).

As per claim 26

Cheng teaches

modifying the selection data in response to the information comprising preexisting software (see at least col. 9:17-22 **"Once all of the software updates have**



been installed, the client application 104 logs out 215 of the service provider computer 102, and any necessary payment information (*i.e. selection data*) fro the user may be updated (*i.e. modified*), such as payment based on the number of software updates purchased, the online connection time, and the like”).

As per claim 29

Cheng teaches

storing download transaction data to a central database (see at least col. 10:55-62 “Finally, the update database 709 may also store information describing an installation process (*i.e. transaction data*) for installing a software update...”).

As per claim 30

Cheng teaches

wherein the download transaction data comprises a download transaction status (see at least col. 10:55-62 “Finally, the update database 709 may also store information describing an installation process (*i.e. transaction data such as status*) for installing a software update...”).

As per claim 34

Cheng teaches

wherein the software is data comprising data related to services (see at least col. 6:39-40 **"Other types of information useful to providing product support, technical service, or the like may also be beneficially provided"**).

12. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano), and further in view of Anderson et al. (USPN 7,143,408, hereinafter Anderson).

As per claim 11

Neither Cheng nor Kawano teaches

wherein the hardware unit is linked to the first software handling machine by a dedicated communications link.

However, Anderson teaches

wherein the hardware unit is linked to the first software handling machine by a dedicated communications link (see at least col. 4:65-67 **"The hardware preferably has a cable that plugs into a hot port of a computer"**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng in combination with Kawano to incorporate the teaching of Anderson to allow the downloaded software to

the client computer to be installed onto a hardware device as teaching by Anderson.

The modification would have been obvious to an ordinary skill in the art because it would allow Cheng to update/upgrade/install the software to any hardware device (i.e. printers, scanners, cameras, etc.) that connected to the client computer in order to allow the hardware device to have up-to-date software version for proper operation.

As per claim 12

Anderson teaches

wherein the download manager executes upon detecting that the hardware on the dedicated communication s link (see at least col. 5:1-2 **"...such as an operating system of the computer is able to automatically and immediately detect connection of the device to the computer"**).

As per claim 13

Cheng teaches

wherein the hardware unit is linked to the first software handling machine over a network comprising a local area network (see at least col. 13:16-17 **"a TCP-IP type connection, or to other network embodiments, such as a WAN, LAN, MAN or the like"**).

As per claim 14

Cheng teaches

wherein the network comprises the Internet (see at least col. 13:15 "**Internet**").

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 35, 37, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Anderson et al. (USPN 7,143,408, hereinafter Anderson).

As per claim 35

Cheng teaches a system for downloading software to a hardware unit from a plurality of vendors over a network, the system comprising:

a plurality of software vendor download servers in the network for providing up-to-date versions of selected plurality of software from the plurality of software vendors (see at least col. 6:31-34 "**Each software vendor computer 103 coupled to the service provider computer 102 stores software update information, software products, information files and the like. The software update information includes applications, binary files, text files, and the like, for updating software products installed on client computer 101**");

a first software handling machine in the network and linked to the hardware unit (see at least col. 6:15 "**client computer 101**" – *the memory of the client computer 101*

*is considered as the hardware unit*), the first software handling machine executing a download manager (see at least col. 6:25 **"the client computer 101 includes a client application 104 that communicates with the service provider computer 102..."**), the download manager initiating a download/installation transaction comprising selected software to be downloaded to the hardware unit from the plurality of download servers, sending a transaction identifier in a download transaction request to a download supervisor over the network (see at least col. 7:5-14 **"the update process is typically initiated on the client computer 101. The user may manually initiate the process or it may occur automatically...In each case, the user logs in 201 to the service provider computer 102 with the client application 104 in a conventional manner, providing a user ID, a password, and the like"**), and downloading and installing the selected software to the hardware unit pursuant to a download/installation instruction received in response to the download transaction request (see at least col. 15:17-19 **"the service provider computer 102 resolves the update ID 819 against the update table 807 to obtain the record for this update, including the URL list 823 identifying the location of the relevant update files. This record is returned to the client computer 101"**), said selected software being determined at the time of sale of the hardware unit (see at least col. 6:12 **"updating diverse software products on user's computers"** – *Note: the diverse software products include applications, system utilities, drivers, and other executables or resources, which are installed/pre-configured in to the computers either at the time of purchased or time of manufactured the computers, and need to be updated to the update-to-date versions.* Cheng further

teaches col. 1:26-32 “As used here **“software vendors”** includes any entity that distributes software products, even if the entity also manufactures or distributes hardware or other non-software products. These software vendors frequently improve their products, by adding new features, or by fixing known problems, and make these software updates available to their users. These updates may or may not be free” – Thus, the diverse software products on the user’s computers are the software products selected to installed either at the time of sale or at the time of manufactured the computers, and the software vendors distribute up-to-date versions to update the selected software products); and

a second software handling machine in the network executing the download supervisor, the download supervisor determining whether the download transaction request is authorized (see at least col. 7:40-45 **“The registered users are authenticated 203 by the service provider computer 102, using conventional authentication mechanisms, such one or more passwords, digital signature, certificate, or the like”**), and, in response to determining that the transaction is authorized, assembling a download/installation instruction comprising up-to-date software access information for the selected software and to send the download/installation instruction to the download manager (see at least col. 15:17-19 **“the service provider computer 102 resolves the update ID 819 against the update table 807 to obtain the record for this update, including the URL list 823 identifying the location of the relevant update files. This record is returned to the client computer 101”**);

Cheng does not explicitly teach

wherein the first software handling machine linked to the hardware unit by an external bus, and wherein the download manager executes upon detecting that the hardware unit is linked to the first software handling machine by said external bus.

However Anderson teaches software installation for a hardware device

wherein the first software handling machine linked to the hardware unit by an external bus (see at least col. 4:65-67 **"The hardware preferably has a cable that plugs into a hot port of a computer"**), and wherein the download manager executes upon detecting that the hardware unit is linked to the first software handling machine by said external bus (see at least col. 5:1-2 **"...such as an operating system of the computer is able to automatically and immediately detect connection of the device to the computer"**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify Cheng's teaching to incorporate the teaching of Anderson to allow the software downloaded to the client computer to be installed onto a hardware device as teaching by Anderson. The modification would have been obvious to an ordinary skill in the art because it would allow Cheng to update/upgrade/install the software to any hardware device (i.e. printers, scanners, cameras, etc.) that connected

to the client computer in order to allow the hardware device to have up-to-date software version for proper operation.

As per claim 37

Cheng teaches

wherein the download manager executes on the hardware unit (see at least col. 13:30 "**the client computer 101 executes the client application 104 in memory 900**").

As per claim 41

Cheng teaches

wherein the software is data comprising data related to services (see at least col. 6:39-40 "**Other types of information useful to providing product support, technical service, or the like may also be beneficially provided**").

15. Claims 42, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano).

As per claim 42



Cheng teaches a hardware unit execute a download manager capable of downloading and installing up-to-date versions of selected software from a plurality of software vendors download servers in a network, comprising:

enable the download supervisor to identify and validate the download transaction (see at least col. 7:40-45 **"The registered users are authenticated 203 by the service provider computer 102, using conventional authentication mechanisms, such one or more passwords, digital signature, certificate, or the like"**).

means to receive a communication from the download supervisor comprising a download/installation instruction that includes up-to-date software access information for the selected software of the download transaction (see at least col. 15:17-19 **"the service provider computer 102 resolves the update ID 819 against the update table 807 to obtain the record for this update, including the URL list 823 identifying the location of the relevant update files. This record is returned to the client computer 101"**); and

means to perform the download and installation of the up-to-date versions of the selected software to the hardware unit according to the download/installation instruction (see at last col. 15:21-35 **"The client computer 101 accesses the identified URLs and downloads the software update files, typically from the software vendors computer 103...The software update is then installed 212 by the client application 104 as described"**).

Cheng does not explicitly teach

means to initiate the download manager during a boot sequence of the hardware unit; and

means to provide a transaction identifier and software selection data indicating the selected software for which up-to-date versions are to be downloaded to a download supervisor in the network, said software selection data being determined at the time of sale of the hardware unit.

However, Kawano teaches software updating system comprising

means to initiate the download manager during a boot sequence of the hardware unit (see FIG. 2; see also at least col. 5:46-60 **"when the power of the CE device 1 is turned on (i.e. boot sequence), it is judged that all of the software needs to have the presence of update data confirmed...if it is judged that such software does exist, the process proceeds to step S3"**);

means to provide a transaction identifier and software selection data indicating the selected software for which up-to-date versions are to be downloaded to a download supervisor in the network, said software selection data being determined at the time of sale of the hardware unit (see at least col. 9:7-36 **"In step S61, when the user who has purchased the CE device 1 runs a registration application for the CE device 1 (for example, a browser, or a dedicated application for registering the CE device), the CE device 1 performs a process for obtaining user information (i.e. selection data). For example, the CE device 1 may display on a display of output section 47 an input form for entering user information such as the user's name, address,**

**telephone number, as well as for example, zip-code, date of birth, sex, type of credit card, credit card number and expiration date and the like (hereinafter referred to as user information for authentication), the device ID is already displayed in the input form...When the user hits the register button 47C, the CE device 1 obtains the information entered in the input form as the user information for authentication...the CE device transmits the user information for authentication..." – Note: The user information being determined at the time of sale of the CE device 1. The user information in combination with the CE device ID is used to register the device to the update data supply server. This information also indicates the selected software stored in the CE device 1 to the update data supply server in order to update the selected software stored in the CE device 1 at the time of sale)).**

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng to incorporate the teaching of Kawano to allow the client computers to provide the user information (*i.e. selection data*) with the transaction identifier (*i.e. user ID, password, device ID, or the like*) to register the client computers with the providers or vendors for updating the diverse software products. The modification would have been obvious to an ordinary skill in the art because it would allow the server to use the user information for authentication and updating purposes.

As per claim 44

Cheng teaches

wherein the selected software may be selected or modified by a user in an interactive process (see at least col. 7:62-63 **"The client application 104 displays 206 the list of applicable software updates to the user, for review and selection"**).

As per claim 45

Kawano teaches

wherein the selected software comprises a predetermined selection (see at least col. 5:38-41 **"the CE device 1 judges whether or not it is necessary to confirm the presence of updates for all of the installed software, which in this example would be the software program that come bundled with the CE device 1"**).

16. Claims 21 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano), and further in view of Gulliver et al. (20040054597, hereinafter Gulliver).

As per claims 21 and 53

Neither Cheng or Kawano teaches

wherein obtaining the selection data by a point of sale application comprises providing an automated kiosk for selecting software and recording the selections for a download transaction

However, Gulliver teaches

wherein obtaining the selection data by a point of sale application comprises providing an automated kiosk for selecting software and recording the selections for a download transaction (see at least FIG. 1; see also paragraph [0017] **"a computer kiosk 12 in which is located in a retail store 14...contains demonstration versions of software and, if desired, full version of the software"**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng in combination with Kawano to incorporate the teaching of Gulliver to allow the user to select and record software selection for downloading. The modification would have been obvious to one of ordinary skill in the art because computer kiosk provides an easy and convenient way for selecting and downloading software.

17. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano), and further in view of Gulliver et al. (20040054597, hereinafter Gulliver).

As per claim 27

Neither Cheng nor Kawano teaches

wherein the software access information comprises a plurality of authentication codes for activating or downloading said up-to-date versions of selected plurality of different software from a plurality of software vendors.

However, Goto teaches

wherein the software access information comprises a plurality of authentication codes for activating or downloading said up-to-date versions of selected plurality of different software from a plurality of software vendors (see at least paragraph [0058-0059] **"The maintenance management server 102 transmits a Control Program Type, a Program Version, the serial number of object DKC and the authentication data through the public telephone network to the maintenance center communication controller 201 in the DKC 110....the RMC download controller 301 transmits the authentication data generated from the maintenance management server 102 to the control program upload server 106. Receiving the authentication data, the control program upload server 106 verifies the authentication data and responds the result to the Internet controller 301 with an OK, when the authentication is verified. Then the RMC download controller 301 requests the transmission of file list constituting the control program to the control program upload server...the control program upload server 106 transmits the file list to the RMC download controller 301..."**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng in combination with Kawano to incorporate the teaching of Goto to include in the URL list the authentication code for verifying the updates. The modification would have been obvious to one having an ordinary skill because it would prevent the potential problem of an intentional update of the program by a third party (see Goto paragraph [0015]).

As per claim 28

Goto teaches

wherein the authentication codes are provided by an authentication subsystem of the download supervisor (see at least paragraph [0058] **"The maintenance management server 102 transmits a Control Program Type, a Program Version, the serial number of object DKC and the authentication data through the public telephone network to the maintenance center communication controller 201 in the DKC 110").**

18. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano), and further in view of Kato et al. (USPN 6,470,496, hereinafter Kato).

As per claim 31

Neither Cheng nor Kawano teaches

wherein the download transaction status comprises a transaction hold status.

However, Kato teaches

wherein the download transaction status comprises a transaction hold status (see at least col. 18:27-41 **"The status holding unit 158 holds a status value that shows one out of: status 1 from the start of downloading the new control program until the complete transfer of the new download program to the control program storing unit 152..."**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng in combination with Kawano to incorporate the teaching of Kato to include transaction status for downloading. The modification would have been obvious to one of ordinary skill in the art because it would provide downloading status to indicate either the transaction is completed or not.

As per claim 32

Kato teaches

wherein communicating a download/installation instruction from the download supervisor to the download manager is held in abeyance while a transaction is in a hold status (see at least col. 21:66-67 – col. 22:1-2 **"If there are download codes to be**



**downloaded, display a message notifying the user of the presence of the download codes on a monitor or the like and wait for an instruction from the user").**

19. Claims 33 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano), and further in view of Toivonen et al. (USPN 7,345,232, B2 hereinafter Toivonen).

As per claims 33 and 40

Neither Cheng nor Kawano teaches

wherein the software is data comprising music, images, and video.

However, Toivonen teaches

wherein the software is data comprising music, images, and video (see at least col. 1:14-16 "**Conventional mobile media playback device allow users to download and playback media, such as music, videos, pictures and images**").

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize downloading music, images, and video is well known to the art and would modify the teaching of Cheng in combination with Kawano to incorporate Toivonen's teaching to allow downloading music, images, and video to

the client computers. The modification would have been obvious to one having an ordinary skill in the art because it would fulfill the user's needs.

20. Claims 36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Anderson et al. (USPN 7,143,408, hereinafter Anderson), and in further view of Goto (20010047514 A1, hereinafter Goto).

As per claim 36

Neither Cheng nor Anderson teaches

wherein the software access information comprises a plurality of authentication codes for a plurality of encryption methods to download from a plurality of download server.

However, Goto teaches

wherein the software access information comprises a plurality of authentication codes for a plurality of encryption methods to download from a plurality of download server (see at least paragraph [0058-0059] **"The maintenance management server 102 transmits a Control Program Type, a Program Version, the serial number of object DKC and the authentication data through the public telephone network to the maintenance center communication controller 201 in the DKC 110....the RMC download controller 301 transmits the authentication data generated from the**

**maintenance management server 102 to the control program upload server 106. Receiving the authentication data, the control program upload server 106 verifies the authentication data and responds the result to the Internet controller 301 with an OK, when the authentication is verified. Then the RMC download controller 301 requests the transmission of file list constituting the control program to the control program upload server...the control program upload server 106 transmits the file list to the RMC download controller 301...").**

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng in combination with Kawano to incorporate the teaching of Goto to include in the URL list the authentication code for verifying the updates. The modification would have been obvious to one having an ordinary skill because it would prevent the potential problem of an intentional update of the program by a third party (see Goto paragraph [0015]).

As per claim 39

Cheng teaches

wherein the software access information comprises a network address for downloading software (see at least col. 15:17-19 **"the service provider computer 102 resolves the update ID 819 against the update table 807 to obtain the record for this update, including the URL list 823 identifying the location of the relevant update files. This record is returned to the client computer 101")**).

Neither Cheng nor Anderson teaches

wherein the software access information comprises a plurality of authentication codes to activate a plurality of software.

However, Goto teaches

wherein the software access information comprises a plurality of authentication codes to activate a plurality of software (see at least paragraph [0058-0059] "**The maintenance management server 102 transmits a Control Program Type, a Program Version, the serial number of object DKC and the authentication data through the public telephone network to the maintenance center communication controller 201 in the DKC 110....the RMC download controller 301 transmits the authentication data generated from the maintenance management server 102 to the control program upload server 106. Receiving the authentication data, the control program upload server 106 verifies the authentication data and responds the result to the Internet controller 301 with an OK, when the authentication is verified. Then the RMC download controller 301 requests the transmission of file list constituting the control program to the control program upload server...the control program upload server 106 transmits the file list to the RMC download controller 301...**").

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng in combination with Kawano to incorporate the teaching of Goto to include in the URL list the authentication code for verifying the updates. The modification would have been obvious to one having an ordinary skill because it would prevent the potential problem of an intentional update of the program by a third party (see Goto paragraph [0015]).

21. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (USPN 6,151,643, hereinafter Cheng), in view of Kawano et al. (USPN 7,316,013, hereinafter Kawano), and further in view of DaCosta et al. (20020120725, hereinafter DaCosta).

As per claim 43

Neither Cheng nor Kawano teaches

wherein the means to initiate the download manager during a boot sequence of the hardware unit comprises executing a bootstrap loader to establish basic connectivity and download functions for the hardware unit in order to load a program to which the bootstrap loader hand off control.

However, DaCosta teaches

wherein the means to initiate the download manager during a boot sequence of the hardware unit comprises executing a bootstrap loader to establish basic connectivity

and download functions for the hardware unit in order to load a program to which the bootstrap loader hand off control (see at least paragraph [0011] **"In one embodiment, upon boot up of the computer system, the boot loader reads the addresses for each application to be updated, locates the interface for connecting with the Internet, and connects with each of the Web sites"**; see also paragraph [0030] **"Agent 205 is a software program or set of computer-readable program instructions that implements the present invention method for updating applications. In one embodiment, agent 205 is the boot loader that executes during boot up of computer system 190 (the boot loader runs at startup to initialize and configure system hardware)"**).

Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the teaching of Cheng in combination with Kawano to incorporate the teaching of DaCosta to execute the boot loader during boot up of the client computer to initialize and configure the client computer for establishing the connectivity with the Internet for downloading. The modification would have been obvious to one having ordinary skill in the art because it would allow the client computer to establishing network connection for downloading software.

***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571)

270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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